



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/621,618	07/18/2003	Raymond E. Umbaugh JR.		2901

23121 7590 09/09/2004

THE LAW FIRM OF HARRIS & BURDICK  
HAROLD BURDICK AND ROBERT HARRIS  
6676 GUNPARK DRIVE  
SUITE E  
BOULDER, CO 80301

EXAMINER

PARSLEY, DAVID J

ART UNIT PAPER NUMBER

3643

DATE MAILED: 09/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/621,618

Applicant(s)

UMBAUGH, RAYMOND E.

Examiner

David J Parsley

Art Unit

3643

NW

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10-17-03
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **Detailed Action**

### ***Claim Objections***

1. Claim 11 is objected to because of the following informalities: in line 2 “includ” should be - -include- -. Appropriate correction is required.

Claim 18 is objected to because of the following informalities: in line 1 “wh r in” should be - -wherein- - and in line 2 “ach” should be - -each- -. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 6-7, 9-11, 13 and 15-<sup>18</sup>~~17~~ are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,225,342 to Farrell or JP Pat. No. 4-88928.

Referring to claims 1-2, 9 and 15, Farrell and the Japanese patent disclose a seed germination and plant supporting utility comprising, a spacer – at 260 of Farrell and – at 1-2 of the Japanese patent, having a central opening therethrough between sides of the spacer – see for example figure 7a of Farrell and figure 6 of the Japanese patent, and mesh – at 265 and 250-252, 240-242 and 230-232 of the Farrell and – at 3-5 of the Japanese patent, maintained at both sides

of the spacer wherein the mesh is held spaced apart a selected distance by the spacer and enshrouds the central opening – see for example figures 7a-7c of Farrell and figure 6 of the Japanese patent. Farrell and the Japanese patent further disclose a first retainer – at 227,278,274,272 of Farrell and – at 1d,2c,5a,4a of the Japanese patent, associable with the spacer at one of the sides thereof for holding the mesh thereat with each of the retainers having an opening therethrough in correspondence with the spacer opening – see for example figures 7a-7c of Farrell and figure 6 of the Japanese patent. Farrell and the Japanese patent further disclose the first and second mesh each have a diameter greater than the inside diameter of the spacer ring and each positioned at a different of the ends of the spacer – see for example figures 7a-7c of Farrell and figures 4-6 of the Japanese patent.

Referring to claim 3, Farrell and the Japanese patent further disclose a second retainer – at 202,206 and/or 264 of Farrell and – at 1d,2c,4a,5a of the Japanese patent, associable with the spacer at another of the sides thereof for holding the mesh thereat – see for example figures 7a-7c of Farrell and figure 6 of the Japanese patent.

Referring to claims 6 and 17, Farrell and the Japanese patent disclose the mesh at one of the sides of the spacer has a mesh size greater than the mesh size of the mesh at another of the sides of the spacer – see for example figure 7b of Farrell and figures 4-6 of the Japanese patent.

Referring to claim 7, Farrell and the Japanese patent disclose the spacer includes first and second spacer components – see for example figure 7a of Farrell and figure 6 of the Japanese patent, each defining a part of the central opening – see for example figures 7a-7c of Farrell and figure 6 of the Japanese patent, and with each having a different one of the sides of the spacer thereat, the first and second spacer components each having an interfacing surface configured to

Art Unit: 3643

abut one another and surrounding the central opening spaced from the different one of the sides thereat – see for example figures 7a-7c of Farrell and proximate 1-2 in figure 6 of the Japanese patent, the mesh being maintained between the interface surfaces – see for example figures 7a-7c of Farrell and figures 4-6 of the Japanese patent.

Referring to claims 10 and 18, Farrell and the Japanese patent further disclose a second spacer – at 206,270 of Farrell and – at 1-2 of the Japanese patent, having a passageway therethrough between first and second ends of the second spacer, a third mesh swath – at 240-242 of Farrell and – at 3-5 of the Japanese patent, positioned at the first end of the second spacer and a third retainer – at 323 of Farrell and – at 1d,2c,4a,5a of the Japanese patent, associable with the second spacer at the first end thereof adjacent to the third mesh swathe thereat, the third retainer having an opening therethrough in correspondence with the second spacer passageway when configured to be associable with both the first and second spacers at the second ends thereof – see for example figures 7a-7c of Farrell and figures 4-6 of the Japanese patent.

Referring to claim 11, Farrell and the Japanese patent further disclose the first and third retainers each include a retaining lip adjacent to the openings therethrough configured to abut the first ends of the first and second spacers respectively to thereby anchor the first and third mesh swathes – see for example figures 7a-7c of Farrell and figures 4-6 of the Japanese patent.

Referring to claims 13 and 16, Farrell and the Japanese patent further disclose the first and second retainers each include a retaining lip – see figures 7a-7c of Farrell and figure 6 of the Japanese patent, adjacent to the opening therethrough configured to abut a respective one of the first and second ends of the first spacer when associated therewith to thereby anchor the first and

second mesh swathes positioned thereat – see for example figures 7a-7c of Farrell and figure 6 of the Japanese patent.

Claims 8, 12, 14 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Farrell.

Referring to claims 8, 12 and 19, Farrell discloses a maintenance platform – at 202-212, having an opening therethrough for receiving and locating the spacer and the mesh when assembled, the first retainer comprising a resilient yet deformable material configured to be securely receivable in the opening through the maintenance platform – see for example figures 7a-7c, and the second retainer comprising a lip – proximate 323,330, at the opening through the maintenance platform – see for example figures 7a-7c.

Referring to claim 14, Farrell discloses the spacer is ring shaped – see figures 7a-7c, and wherein each of the first and second retainers are defined by a ring shaped body configured to be fit over a respective one of the first spacer ends the retaining lip – proximate 272 and 274 and 264, extending annularly from one end of the ring shaped body inwardly at the opening therethrough – see for example figures 7a-7c.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farrell as applied to claim 1 above, and further in view of U.S. Patent No. 4,057,930 to Barham.

Referring to claim 4, Farrell further discloses the spacer is ring shaped – see for example figure 7a, having an inside diameter and an outside diameter – see for example figure 7a, wherein the mesh includes first and second swathes – see at 250-252 and 230 in figure 7a, each with a diameter greater than the inside diameter of the spacer and each positioned at a different one of the sides of the spacer – see for example figures 7a-7c. Farrell does not disclose the mesh swathes are fiber. Barham does disclose fiber mesh – at 13 – see for example column 4 lines 60-65. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Farrell and add the fiber mesh of Barham, so as to allow for the mesh to not corrode during use.

Referring to claim 5, Farrell as modified by Barham further discloses first and second removable retainer rings – at 202,206 and 264 each receivable over a different one of the sides of the spacer holding the fiber swathes thereat – see for example figures 7a-7c of Farrell.

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Farrell as applied to claim 19 above, and further in view of EP Patent No. 0052264. Farrell does not disclose a containment and feeding apparatus and a positioning structure, the positioning structure having stations configured to receive the maintenance platform with the openings through the platform exposed from both above and below the platform and the positioning structure, the positioning structure configured to be received at the containment and feeding apparatus with the openings through the platform exposed from below to operations of the containment and feeding apparatus. The European patent does disclose a containment and feeding apparatus – at 1, and a positioning structure – at 3 – see figures 1-2, the positioning structure having stations configured

Art Unit: 3643

to receive the maintenance platform – at 2, with the openings through the platform exposed from both above and below the platform and the positioning structure, the positioning structure configured to be received at the containment and feeding apparatus with the openings through the platform exposed from below to operations of the containment and feeding apparatus – see for example figures 1-2. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Farrell and add the containment and feeding apparatus of the European patent, so as to allow for the device to propagate plant growth inside the device.

### *Conclusion*

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents are cited to further show the state of the art with respect to plant supporting devices in general:

U.S. Pat. No. 4,531,324 to Yang et al. – shows plant-growing device

U.S. Pat. No. 4,669,217 to Frazee – shows plant-growing device

U.S. Pat. No. 5,324,657 to Tanny – shows plant-growing device

U.S. Pat. No. 5,400,544 to Wien – shows plant-growing device

U.S. Pat. No. 5,611,172 to Dugan et al. – shows plant-growing device

U.S. Pat. No. 6,233,870 to Horibata – shows plant-growing device

U.S. Pat. No. 6,442,893 to Lai – shows plant-growing device

JP Pat. No. 3-290123 – shows plant-growing device



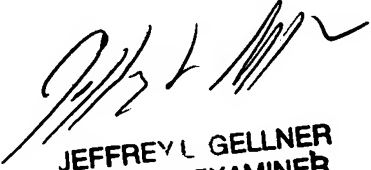
JP Pat. No. 6-38640 – shows plant-growing device

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David J Parsley whose telephone number is (703) 306-0552. The examiner can normally be reached on 9hr compressed.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Poon can be reached on (703) 308-2574. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
David Parsley  
Patent Examiner  
Art Unit 3643

  
JEFFREY L GELLNER  
PRIMARY EXAMINER